

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Applicants respectfully request that the foregoing amendments be entered at least because they narrow the issues for appeal.

Claims 1, 14, 17 and 30 are currently being amended. No new matter is being added.

This amendment changes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-6, 8-15, 17-31, 33 and 34 are now pending in this application, of which claims 33 and 34 are withdrawn from consideration.

Improper final rejection

Applicants note that the finality of the outstanding rejection is improper. At least dependent claims 14 and 30 were not amended in the last Amendment, and yet the Patent Office introduced a new ground of rejection of claims 14 and 30 under 35 U.S.C. § 112, second paragraph, as noted below. Accordingly, applicants respectfully request that the Patent Office withdraw the finality of the outstanding Office Action.

Rejection under 35 U.S.C. § 112, Second Paragraph

Claims 14 and 30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 14 and 30 are amended to address the issues raised in the Office Action, and applicants respectfully request that the rejection under 35 U.S.C. § 112, second paragraph be withdrawn.

Rejections under 35 U.S.C. §§ 102 and 103

Claims 17, 18, 20 and 28 are rejected under 35 U.S.C. § 102(b) as being anticipated by WO 01/53651 to Lenormand et al. (hereafter “Lenormand”). Claims 19 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenormand in view of U.S. Patent No. 4,031,919 (hereafter “Ortloff”). Claims 1, 2, 4, 6, 8-15, 17, 22-27 and 29-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenormand in view of U.S. Patent No. 2,419,053 (hereafter “Bennett”). Claims 3 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenormand in view of Bennett and further in view of Ortloff. Applicants respectfully traverse these rejections for at least the following reasons.

Independent claim 1, as amended, recites:

A flexible riser system for a loading system for transferring hydrocarbons between a sea bed installation and a vessel floating at a sea surface, comprising:

a flexible riser; and

protection means configured to protect the riser from impact when the riser is connected to the vessel, the protection means being submerged below the vessel and covering at least an upper part of the riser and terminating above the sea bed when the riser is submerged and connected to the vessel, the protecting means being formed of *a plurality of separate units suspended from each other such that they are movable with respect to each other in a lateral and axial direction, the separate units arranged to be movable in transverse direction with respect to the riser*, the protecting means further being provided with a stretching means or a tensioning means attached to a lower end of the protection means,

wherein the riser in the vicinity of the stretching or tensioning means is provided with a collar designed to reduce detrimental impact of the stretching or tensioning means on the riser caused by relative movement of the stretching or tensioning means with respect to the riser.

The references applied in the rejection of the claims fail to disclose or suggest at least the above italicized features of claim 1 of “*a plurality of separate units suspended from each other such that they are movable with respect to each other in a lateral and axial direction, the separate units arranged to be movable in transverse direction with respect to the riser*” in the context of claim 1.

As an initial matter, Lenormand is a French language document. In referring to Lenormand below, applicants refer to the English language equivalent, U.S. Patent 6,712,559.

Lenormand discloses a bottom-to-surface link comprising a riser 1 fitted with four floats 2 constituting a float zone 4 (FIG. 1, col. 7, lines 31-35). The Lenormand floats are configured to stabilize the upper part of the flexible riser 1, and thereby damp the appearance of a combined “guitar-and pendulum” vibration phenomenon (See col. 3, line 56 to col. 4, line 14). Lenormand discloses an embodiment with an additional mass 7 in a bottom float (FIG. 9).

Lenormand, however, does not disclose the feature of claim 1 of “a plurality of separate units suspended from each other such that they are movable with respect to each other in a lateral and axial direction, the separate units arranged to be movable in transverse direction with respect to the riser.” The Patent Office apparently recognizes that Lenormand does not disclose the feature of “the separate units arranged to be movable in transverse direction with respect to the riser,” but on page 5 of the Office Action supplies Bennett for curing the deficiencies of Lenormand. Applicants respectfully disagree.

Bennett does not disclose the feature of claim 1 of “a plurality of separate units suspended from each other such that they are movable with respect to each other in a lateral and axial direction,” or “the separate units arranged to be movable in transverse direction with respect to the riser” and thus even if Lenormand and Bennett were combined, the combination would not have all of the features of claim 1. Bennett discloses a buoyant electrical cable tube 2 and floats 6 on the tubing. In contrast to the arrangement in claim 1, Bennett discloses that the floats 6 are cemented to the tubing 2 (col. 2, lines 15-18). Because the floats 6 are cemented to the tubing 2, the floats are not movable in a transverse direction with respect to the tubing 2. Further, because the floats 6 are cemented to the tubing 2, the floats are not movable with respect to each other in an axial direction. Thus, even if Lenormand and Bennett were combined, the combination would not have all of the features of claim 1.

Moreover, the Patent Office has not provided a properly articulated reason for combining Lenormand and Bennett. The Patent Office proffers as a reason for combining Lenormand and Bennett as being in order to reduce VIV. Nowhere does Bennett discloses the reasons for providing his floats for a buoyant electric cable as being in order to reduce VIV. Moreover, the buoyancy system of Bennett is for floating an electric cable on the top of

the water, while the floats 2 to in Lenormand are for damping the appearance of a combined “guitar-and pendulum” vibration phenomenon of a submerged riser. The system of Bennett does not suggest to one skilled in the art reducing VIV in a submerged riser system such as that of Lenormand.

Ortloff was cited for disclosing other features of the claims but fails to cure the deficiencies of Lenormand and Bennett.

Moreover, the references applied in the rejection of the claims fail to describe a protective means able to protect the riser from the impact, such as impact from ice.

Independent claim 17, as amended, includes features corresponding to those discussed above with respect to claim 1, and is patentable for at least the same reasons.

The dependent claim are patentable for at least the same reasons as their respective independent claims, as well as for further patentable features recited therein.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. § 1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date November 19, 2009

By Thomas G. Bilodeau

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 672-5485
Facsimile: (202) 672-5399

William T. Ellis
Attorney for Applicant
Registration No. 26,874

Thomas G. Bilodeau
Attorney for Applicant
Registration No. 43,438